Contractor's Report to the Board

Evaluation of Health Effects of Recycled Waste Tires in Playground and Track Products

(Publication #622-06-013)

Produced under contract by:

OEHHA
Office of Environmental Health Hazard Assessment

January 2007

Appendix A: Raw Data From Gastric Digestion Experiment

INTEGRATED WASTE MANAGEMENT BOARD

Sequoia Analytical

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24 March, 2005

Vidair
Dept. of Toxic Substances Contol-Berkeley
700 Heinz Avenue, Suite 100
Berkeley, CA 94710

RE: OEHHA Playground Study
Work Order: MOC0103

Enclosed are the results of analyses for samples received by the laboratory on 03/02/05 18:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Dept Manager - Project Manager

CA ELAP Certificate #1210

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G	MOC0103-01	Water	03/01/05 00:00	03/02/05 18:40
S	MOC0103-02	Water	03/01/05 00:00	03/02/05 18:40
O	MOC0103-03	Water	03/01/05 00:00	03/02/05 18:40
CON	MOC0103-04	Water	03/01/05 00:00	03/02/05 18:40

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700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G (MOC0103-01) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
Antimony	**110**	0.50	ug/l	1	5C14015	03/14/05	03/16/05	EPA 6020	
Arsenic	**6.1**	1.0	"	"	"	"	"	"	
Barium	**130**	1.0	"	"	"	"	"	"	
Beryllium	ND	0.50	"	"	"	"	"	"	
Cadmium	**2.2**	0.25	"	"	"	"	"	"	
Chromium	**41**	2.0	"	"	"	"	"	"	
Cobalt	**45**	0.50	"	"	"	"	"	"	
Copper	**1500**	50	"	100	"	"	03/16/05	"	
Lead	**140**	0.50	"	1	"	"	03/16/05	"	
Molybdenum	**11**	1.0	"	"	"	"	"	"	
Nickel	**27**	1.0	"	"	"	"	"	"	
Selenium	**18**	1.0	"	"	"	"	"	"	
Silver	ND	0.25	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**9.0**	1.0	"	"	"	"	"	"	
Zinc	**17000**	500	"	100	"	"	03/16/05	"	
S (MOC0103-02) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
Antimony	**42**	0.50	ug/l	1	5C14015	03/14/05	03/16/05	EPA 6020	
Arsenic	**5.4**	1.0	"	"	"	"	"	"	
Barium	**110**	1.0	"	"	"	"	"	"	
Beryllium	ND	0.50	"	"	"	"	"	"	
Cadmium	**2.8**	0.25	"	"	"	"	"	"	
Chromium	**57**	2.0	"	"	"	"	"	"	
Cobalt	**50**	0.50	"	"	"	"	"	"	
Copper	**960**	50	"	100	"	"	03/16/05	"	
Lead	**120**	0.50	"	1	"	"	03/16/05	"	
Molybdenum	**18**	1.0	"	"	"	"	"	"	
Nickel	**27**	1.0	"	"	"	"	"	"	
Selenium	**10**	1.0	"	"	"	"	"	"	
Silver	ND	0.25	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**9.5**	1.0	"	"	"	"	"	"	
Zinc	**26000**	500	"	100	"	"	03/16/05	"	

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700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
O (MOC0103-03) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
Antimony	**1.7**	0.50	ug/l	1	5C14015	03/14/05	03/16/05	EPA 6020	
Arsenic	**4.7**	1.0	"	"	"	"	"	"	
Barium	**870**	100	"	100	"	"	03/16/05	"	
Beryllium	ND	0.50	"	1	"	"	03/16/05	"	
Cadmium	**1.1**	0.25	"	"	"	"	"	"	
Chromium	**35**	2.0	"	"	"	"	"	"	
Cobalt	**33**	0.50	"	"	"	"	"	"	
Copper	**1600**	50	"	100	"	"	03/16/05	"	
Lead	**48**	0.50	"	1	"	"	03/16/05	"	
Molybdenum	**8.5**	1.0	"	"	"	"	"	"	
Nickel	**22**	1.0	"	"	"	"	"	"	
Selenium	**7.1**	1.0	"	"	"	"	"	"	
Silver	ND	0.25	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**5.8**	1.0	"	"	"	"	"	"	
Zinc	**13000**	500	"	100	"	"	03/16/05	"	
CON (MOC0103-04) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
Antimony	ND	0.50	ug/l	1	5C14015	03/14/05	03/16/05	EPA 6020	
Arsenic	ND	1.0	"	"	"	"	"	"	
Barium	**4.2**	1.0	"	"	"	"	"	"	
Beryllium	ND	0.50	"	"	"	"	"	"	
Cadmium	**0.44**	0.25	"	"	"	"	"	"	
Chromium	**16**	2.0	"	"	"	"	"	"	
Cobalt	ND	0.50	"	"	"	"	"	"	
Copper	**8.3**	0.50	"	"	"	"	"	"	
Lead	**4.6**	0.50	"	"	"	"	"	"	
Molybdenum	ND	1.0	"	"	"	"	"	"	
Nickel	**1.1**	1.0	"	"	"	"	"	"	
Selenium	**3.0**	1.0	"	"	"	"	"	"	
Silver	ND	0.25	"	"	"	"	"	"	
Thallium	ND	1.0	"	"	"	"	"	"	
Vanadium	**3.3**	1.0	"	"	"	"	"	"	
Zinc	**16**	5.0	"	"	"	"	"	"	

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700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Tentatively Identified Compounds by GC/MS

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G (MOC0103-01) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
o-cyanobenzoic acid	**990**	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
cyclohexanamine, N-cyclohexyl-	**190**	190	"	"	"	"	"	"	
Benzothiazole	**320**	190	"	"	"	"	"	"	
2(3H)-Benzothiazolone	**640**	190	"	"	"	"	"	"	
S (MOC0103-02) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Benzothiazole	**450**	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
1H-isoindole-1,3(2H)-dione	**490**	190	"	"	"	"	"	"	
cyclohexanamine, N-cyclohexyl-	**410**	190	"	"	"	"	"	"	
2(3H)-Benzothiazolone	**450**	190	"	"	"	"	"	"	
O (MOC0103-03) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
o-cyanobenzoic acid	**910**	36	ug/l	2	5C19005	03/19/05	03/23/05	EPA 8270C	HT-03
2(3H)-Benzothiazolone	**480**	36	"	"	"	"	"	"	HT-03
Benzothiazole	**390**	36	"	"	"	"	"	"	HT-03
cyclohexanone	**48**	36	"	"	"	"	"	"	HT-03
Formamide, N-cyclohexyl-	**110**	36	"	"	"	"	"	"	HT-03
CON (MOC0103-04) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									
benzaldehyde, 3-hydroxy-4-methoxy-	**25**	19	ug/l	1	5C19005	03/19/05	03/23/05	EPA 8270C	HT-03
Hexanedioic acid, bis(2-ethylhexyl)	**28**	19	"	"	"	"	"	"	HT-03

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700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G (MOC0103-01) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Aniline	**2800**	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
Acenaphthene	ND	190	"	"	"	"	"	"	
Acenaphthylene	ND	190	"	"	"	"	"	"	
Anthracene	ND	190	"	"	"	"	"	"	
Benzo (a) anthracene	ND	190	"	"	"	"	"	"	
Benzo (a) pyrene	ND	190	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	190	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	370	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	190	"	"	"	"	"	"	
Benzoic acid	ND	740	"	"	"	"	"	"	
Benzyl alcohol	ND	370	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	190	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	370	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	190	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	370	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	190	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	190	"	"	"	"	"	"	
4-Chloroaniline	ND	1900	"	"	"	"	"	"	
2-Chloronaphthalene	ND	190	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	190	"	"	"	"	"	"	
2-Chlorophenol	ND	190	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	370	"	"	"	"	"	"	
Chrysene	ND	190	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	190	"	"	"	"	"	"	
Dibenzofuran	ND	190	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	190	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	370	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	370	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	370	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	1900	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	190	"	"	"	"	"	"	
Diethyl phthalate	ND	190	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	370	"	"	"	"	"	"	
Dimethyl phthalate	ND	190	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	190	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	370	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	190	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	190	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	370	"	"	"	"	"	"	
Fluoranthene	ND	190	"	"	"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G (MOC0103-01) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Fluorene	ND	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
Hexachlorobenzene	ND	190	"	"	"	"	"	"	
Hexachlorobutadiene	ND	370	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	370	"	"	"	"	"	"	
Hexachloroethane	ND	370	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	370	"	"	"	"	"	"	
Isophorone	ND	190	"	"	"	"	"	"	
2-Methylnaphthalene	ND	190	"	"	"	"	"	"	
2-Methylphenol	ND	190	"	"	"	"	"	"	
4-Methylphenol	ND	190	"	"	"	"	"	"	
Naphthalene	ND	190	"	"	"	"	"	"	
2-Nitroaniline	ND	370	"	"	"	"	"	"	
3-Nitroaniline	ND	3700	"	"	"	"	"	"	
4-Nitroaniline	ND	1900	"	"	"	"	"	"	
Nitrobenzene	ND	190	"	"	"	"	"	"	
2-Nitrophenol	ND	190	"	"	"	"	"	"	
4-Nitrophenol	ND	370	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	190	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	370	"	"	"	"	"	"	
Pentachlorophenol	ND	370	"	"	"	"	"	"	
Phenanthrene	ND	190	"	"	"	"	"	"	
Phenol	**190**	190	"	"	"	"	"	"	
Pyrene	ND	190	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	370	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	190	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	190	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*90 %*	*40-115*		"	"	"	"	
Surrogate: Phenol-d6		*93 %*	*20-115*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*81 %*	*50-115*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*90 %*	*70-115*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*77 %*	*35-115*		"	"	"	"	
Surrogate: p-Terphenyl-d14		*99 %*	*70-130*		"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S (MOC0103-02) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Aniline	**3000**	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
Acenaphthene	ND	190	"	"	"	"	"	"	
Acenaphthylene	ND	190	"	"	"	"	"	"	
Anthracene	ND	190	"	"	"	"	"	"	
Benzo (a) anthracene	ND	190	"	"	"	"	"	"	
Benzo (a) pyrene	ND	190	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	190	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	380	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	190	"	"	"	"	"	"	
Benzoic acid	ND	770	"	"	"	"	"	"	
Benzyl alcohol	ND	380	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	190	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	380	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	190	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	380	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	190	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	190	"	"	"	"	"	"	
4-Chloroaniline	ND	1900	"	"	"	"	"	"	
2-Chloronaphthalene	ND	190	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	190	"	"	"	"	"	"	
2-Chlorophenol	ND	190	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	380	"	"	"	"	"	"	
Chrysene	ND	190	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	190	"	"	"	"	"	"	
Dibenzofuran	ND	190	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	190	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	380	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	380	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	380	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	1900	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	190	"	"	"	"	"	"	
Diethyl phthalate	ND	190	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	380	"	"	"	"	"	"	
Dimethyl phthalate	ND	190	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	190	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	380	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	190	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	190	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	380	"	"	"	"	"	"	
Fluoranthene	ND	190	"	"	"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S (MOC0103-02) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Fluorene	ND	190	ug/l	10	5C19005	03/19/05	03/23/05	EPA 8270C	
Hexachlorobenzene	ND	190	"	"	"	"	"	"	
Hexachlorobutadiene	ND	380	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	380	"	"	"	"	"	"	
Hexachloroethane	ND	380	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	380	"	"	"	"	"	"	
Isophorone	ND	190	"	"	"	"	"	"	
2-Methylnaphthalene	ND	190	"	"	"	"	"	"	
2-Methylphenol	ND	190	"	"	"	"	"	"	
4-Methylphenol	ND	190	"	"	"	"	"	"	
Naphthalene	ND	190	"	"	"	"	"	"	
2-Nitroaniline	ND	380	"	"	"	"	"	"	
3-Nitroaniline	ND	3800	"	"	"	"	"	"	
4-Nitroaniline	ND	1900	"	"	"	"	"	"	
Nitrobenzene	ND	190	"	"	"	"	"	"	
2-Nitrophenol	ND	190	"	"	"	"	"	"	
4-Nitrophenol	ND	380	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	190	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	380	"	"	"	"	"	"	
Pentachlorophenol	ND	380	"	"	"	"	"	"	
Phenanthrene	ND	190	"	"	"	"	"	"	
Phenol	ND	190	"	"	"	"	"	"	
Pyrene	ND	190	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	380	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	190	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	190	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*93 %*	*40-115*		"	"	"	"	
Surrogate: Phenol-d6		*98 %*	*20-115*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*84 %*	*50-115*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*89 %*	*70-115*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*76 %*	*35-115*		"	"	"	"	
Surrogate: p-Terphenyl-d14		*104 %*	*70-130*		"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
O (MOC0103-03) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03, R-05**
Aniline	**6700**	360	ug/l	20	5C19005	03/19/05	03/22/05	EPA 8270C	
Acenaphthene	ND	360	"	"	"	"	"	"	
Acenaphthylene	ND	360	"	"	"	"	"	"	
Anthracene	ND	360	"	"	"	"	"	"	
Benzo (a) anthracene	ND	360	"	"	"	"	"	"	
Benzo (a) pyrene	ND	360	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	360	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	710	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	360	"	"	"	"	"	"	
Benzoic acid	ND	1400	"	"	"	"	"	"	
Benzyl alcohol	ND	710	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	360	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	710	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	360	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	710	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	360	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	360	"	"	"	"	"	"	
4-Chloroaniline	ND	3600	"	"	"	"	"	"	
2-Chloronaphthalene	ND	360	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	360	"	"	"	"	"	"	
2-Chlorophenol	ND	360	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	710	"	"	"	"	"	"	
Chrysene	ND	360	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	360	"	"	"	"	"	"	
Dibenzofuran	ND	360	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	360	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	710	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	710	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	710	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	3600	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	360	"	"	"	"	"	"	
Diethyl phthalate	ND	360	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	710	"	"	"	"	"	"	
Dimethyl phthalate	ND	360	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	360	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	710	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	360	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	360	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	710	"	"	"	"	"	"	
Fluoranthene	ND	360	"	"	"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
O (MOC0103-03) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03, R-05**
Fluorene	ND	360	ug/l	20	5C19005	03/19/05	03/22/05	EPA 8270C	
Hexachlorobenzene	ND	360	"	"	"	"	"	"	
Hexachlorobutadiene	ND	710	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	710	"	"	"	"	"	"	
Hexachloroethane	ND	710	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	710	"	"	"	"	"	"	
Isophorone	ND	360	"	"	"	"	"	"	
2-Methylnaphthalene	ND	360	"	"	"	"	"	"	
2-Methylphenol	ND	360	"	"	"	"	"	"	
4-Methylphenol	ND	360	"	"	"	"	"	"	
Naphthalene	ND	360	"	"	"	"	"	"	
2-Nitroaniline	ND	710	"	"	"	"	"	"	
3-Nitroaniline	ND	7100	"	"	"	"	"	"	
4-Nitroaniline	ND	3600	"	"	"	"	"	"	
Nitrobenzene	ND	360	"	"	"	"	"	"	
2-Nitrophenol	ND	360	"	"	"	"	"	"	
4-Nitrophenol	ND	710	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	360	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	710	"	"	"	"	"	"	
Pentachlorophenol	ND	710	"	"	"	"	"	"	
Phenanthrene	ND	360	"	"	"	"	"	"	
Phenol	ND	360	"	"	"	"	"	"	
Pyrene	ND	360	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	710	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	360	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	360	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*98 %*	*40-115*		"	"	"	"	
Surrogate: Phenol-d6		*101 %*	*20-115*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*78 %*	*50-115*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*86 %*	*70-115*		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*69 %*	*35-115*		"	"	"	"	
Surrogate: p-Terphenyl-d14		*90 %*	*70-130*		"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CON (MOC0103-04) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Acenaphthene	ND	19	ug/l	1	5C19005	03/19/05	03/23/05	EPA 8270C	
Acenaphthylene	ND	19	"	"	"	"	"	"	
Anthracene	ND	19	"	"	"	"	"	"	
Benzo (a) anthracene	ND	19	"	"	"	"	"	"	
Benzo (a) pyrene	ND	19	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	19	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	37	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	19	"	"	"	"	"	"	
Benzoic acid	ND	74	"	"	"	"	"	"	
Benzyl alcohol	ND	37	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	19	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	37	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	19	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	37	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	19	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	19	"	"	"	"	"	"	
4-Chloroaniline	ND	190	"	"	"	"	"	"	
2-Chloronaphthalene	ND	19	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	19	"	"	"	"	"	"	
2-Chlorophenol	ND	19	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	37	"	"	"	"	"	"	
Chrysene	ND	19	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	19	"	"	"	"	"	"	
Dibenzofuran	ND	19	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	19	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	37	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	37	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	37	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	190	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	19	"	"	"	"	"	"	
Diethyl phthalate	ND	19	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	37	"	"	"	"	"	"	
Dimethyl phthalate	ND	19	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	19	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	37	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	19	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	19	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	37	"	"	"	"	"	"	
Fluoranthene	ND	19	"	"	"	"	"	"	
Fluorene	ND	19	"	"	"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CON (MOC0103-04) Water Sampled: 03/01/05 00:00 Received: 03/02/05 18:40									**HT-03**
Hexachlorobenzene	ND	19	ug/l	1	5C19005	03/19/05	03/23/05	EPA 8270C	
Hexachlorobutadiene	ND	37	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	37	"	"	"	"	"	"	
Hexachloroethane	ND	37	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	37	"	"	"	"	"	"	
Isophorone	ND	19	"	"	"	"	"	"	
2-Methylnaphthalene	ND	19	"	"	"	"	"	"	
2-Methylphenol	ND	19	"	"	"	"	"	"	
4-Methylphenol	ND	19	"	"	"	"	"	"	
Naphthalene	ND	19	"	"	"	"	"	"	
2-Nitroaniline	ND	37	"	"	"	"	"	"	
3-Nitroaniline	ND	370	"	"	"	"	"	"	
4-Nitroaniline	ND	190	"	"	"	"	"	"	
Nitrobenzene	ND	19	"	"	"	"	"	"	
2-Nitrophenol	ND	19	"	"	"	"	"	"	
4-Nitrophenol	ND	37	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	19	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	37	"	"	"	"	"	"	
Pentachlorophenol	ND	37	"	"	"	"	"	"	
Phenanthrene	ND	19	"	"	"	"	"	"	
Phenol	ND	19	"	"	"	"	"	"	
Pyrene	ND	19	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	37	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	19	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	19	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*78 %*	*40-115*		"	"	"	"	
Surrogate: Phenol-d6		*81 %*	*20-115*		"	"	"	"	
Surrogate: Nitrobenzene-d5		*76 %*	*50-115*		"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*69 %*	*70-115*		"	"	"	"	*S02*
Surrogate: 2,4,6-Tribromophenol		*64 %*	*35-115*		"	"	"	"	
Surrogate: p-Terphenyl-d14		*76 %*	*70-130*		"	"	"	"	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Total Metals by EPA 6000/7000 Series Methods - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C14015 - EPA 3005A / EPA 6020										
Blank (5C14015-BLK1)				Prepared & Analyzed: 03/14/05						
Antimony	ND	0.50	ug/l							
Arsenic	ND	1.0	"							
Cadmium	ND	0.25	"							
Chromium	ND	2.0	"							
Cobalt	ND	0.50	"							
Copper	ND	0.50	"							
Lead	ND	0.50	"							
Nickel	ND	1.0	"							
Selenium	ND	1.0	"							
Silver	ND	0.25	"							
Thallium	ND	1.0	"							
Vanadium	ND	1.0	"							
Zinc	ND	5.0	"							
Blank (5C14015-BLK1)				Prepared: 03/14/05 Analyzed: 03/16/05						
Barium	ND	1.0	"							
Beryllium	ND	0.50	"							
Molybdenum	ND	1.0	"							
Laboratory Control Sample (5C14015-BS1)				Prepared & Analyzed: 03/14/05						
Antimony	48.8	0.50	ug/l	50.0		98	85-115			
Arsenic	48.1	1.0	"	50.0		96	85-115			
Cadmium	48.7	0.25	"	50.0		97	90-115			
Chromium	46.1	2.0	"	50.0		92	85-115			
Cobalt	47.5	0.50	"	50.0		95	85-110			
Copper	48.1	0.50	"	50.0		96	90-115			
Lead	49.4	0.50	"	50.0		99	90-115			
Nickel	48.1	1.0	"	50.0		96	90-115			
Selenium	49.1	1.0	"	50.0		98	85-120			
Silver	47.0	0.25	"	50.0		94	90-115			
Thallium	48.0	1.0	"	50.0		96	75-115			
Vanadium	44.1	1.0	"	50.0		88	75-115			
Zinc	49.8	5.0	"	50.0		100	90-120			

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C14015 - EPA 3005A / EPA 6020										
Laboratory Control Sample (5C14015-BS1)				Prepared: 03/14/05 Analyzed: 03/16/05						
Barium	48.8	1.0	ug/l	50.0		98	85-115			
Beryllium	48.1	0.50	"	50.0		96	75-125			
Molybdenum	47.7	1.0	"	50.0		95	85-110			
Matrix Spike (5C14015-MS1)	**Source: MOB0728-05**			Prepared & Analyzed: 03/14/05						
Antimony	44.1	0.50	ug/l	50.0	0.54	87	85-115			
Arsenic	50.6	1.0	"	50.0	1.7	98	85-115			
Cadmium	48.4	0.25	"	50.0	0.37	96	90-115			
Chromium	55.8	2.0	"	50.0	9.2	93	85-120			
Cobalt	48.4	0.50	"	50.0	1.1	95	85-110			
Copper	55.8	0.50	"	50.0	8.4	95	90-115			
Lead	54.2	0.50	"	50.0	4.0	100	90-115			
Nickel	56.1	1.0	"	50.0	8.5	95	90-115			
Selenium	50.3	1.0	"	50.0	1.5	98	85-120			
Silver	46.1	0.25	"	50.0	0.033	92	90-115			
Thallium	49.2	1.0	"	50.0	0.0050	98	85-120			
Vanadium	52.9	1.0	"	50.0	7.6	91	75-115			
Zinc	81.6	5.0	"	50.0	37	89	90-120			QM02
Matrix Spike (5C14015-MS1)	**Source: MOB0728-05**			Prepared: 03/14/05 Analyzed: 03/16/05						
Barium	131	10	"	50.0	76	110	85-115			
Beryllium	46.7	5.0	"	50.0	0.090	93	75-125			
Molybdenum	46.6	10	"	50.0	1.1	91	85-110			
Matrix Spike Dup (5C14015-MSD1)	**Source: MOB0728-05**			Prepared & Analyzed: 03/14/05						
Antimony	44.4	0.50	ug/l	50.0	0.54	88	85-115	0.7	10	
Arsenic	50.6	1.0	"	50.0	1.7	98	85-115	0	10	
Cadmium	48.5	0.25	"	50.0	0.37	96	90-115	0.2	10	
Chromium	56.2	2.0	"	50.0	9.2	94	85-120	0.7	10	
Cobalt	49.0	0.50	"	50.0	1.1	96	85-110	1	10	
Copper	56.1	0.50	"	50.0	8.4	95	90-115	0.5	10	
Lead	55.1	0.50	"	50.0	4.0	102	90-115	2	10	
Nickel	56.8	1.0	"	50.0	8.5	97	90-115	1	15	
Selenium	49.1	1.0	"	50.0	1.5	95	85-120	2	10	
Silver	46.3	0.25	"	50.0	0.033	93	90-115	0.4	10	
Thallium	49.8	1.0	"	50.0	0.0050	100	85-120	1	10	
Vanadium	53.8	1.0	"	50.0	7.6	92	75-115	2	10	
Zinc	83.0	5.0	"	50.0	37	92	90-120	2	10	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C14015 - EPA 3005A / EPA 6020										
Matrix Spike Dup (5C14015-MSD1)	**Source: MOB0728-05**			Prepared: 03/14/05	Analyzed: 03/16/05					
Barium	128	10	ug/l	50.0	76	104	85-115	2	10	
Beryllium	46.3	5.0	"	50.0	0.090	92	75-125	0.9	15	
Molybdenum	46.4	10	"	50.0	1.1	91	85-110	0.4	10	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Tentatively Identified Compounds by GC/MS - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 5C19005 - EPA 3510C SepFunnel / EPA 8270C

Blank (5C19005-BLK1) Prepared: 03/19/05 Analyzed: 03/21/05

Hexanedioic acid, bis(2-ethylhexyl)	ND	5.0	ug/l							
benzaldehyde, 3-hydroxy-4-methoxy-	ND	5.0	"							
2(3H)-Benzothiazolone	ND	5.0	"							
1H-isoindole-1,3(2H)-dione	ND	5.0	"							
o-cyanobenzoic acid	ND	5.0	"							
cyclohexanamine, N-cyclohexyl-	ND	5.0	"							
Formamide, N-cyclohexyl-	ND	5.0	"							
cyclohexanone	ND	5.0	"							
Benzothiazole	ND	5.0	"							

Sequoia Analytical

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www.sequoialabs.com

Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C19005 - EPA 3510C SepFunnel / EPA 8270C										
Blank (5C19005-BLK1)				Prepared: 03/19/05 Analyzed: 03/21/05						
N-Nitrosodimethylamine	ND	5.0	ug/l							
Carbazole	ND	5.0	"							
Pyridine	ND	20	"							
Benzidine	ND	100	"							
Aniline	ND	5.0	"							
Acenaphthene	ND	5.0	"							
Acenaphthylene	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (a) pyrene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (g,h,i) perylene	ND	10	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzoic acid	ND	20	"							
Benzyl alcohol	ND	10	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	10	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	5.0	"							
4-Chloroaniline	ND	50	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	10	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	5.0	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	5.0	"							
1,2-Dichlorobenzene	ND	10	"							
1,3-Dichlorobenzene	ND	10	"							
1,4-Dichlorobenzene	ND	10	"							
3,3´-Dichlorobenzidine	ND	50	"							
2,4-Dichlorophenol	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C19005 - EPA 3510C SepFunnel / EPA 8270C										
Blank (5C19005-BLK1)				Prepared: 03/19/05 Analyzed: 03/21/05						
2,4-Dimethylphenol	ND	10	ug/l							
Dimethyl phthalate	ND	5.0	"							
4,6-Dinitro-2-methylphenol	ND	5.0	"							
2,4-Dinitrophenol	ND	10	"							
2,4-Dinitrotoluene	ND	5.0	"							
2,6-Dinitrotoluene	ND	5.0	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	5.0	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	10	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	100	"							
4-Nitroaniline	ND	50	"							
Nitrobenzene	ND	5.0	"							
2-Nitrophenol	ND	5.0	"							
4-Nitrophenol	ND	10	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
N-Nitrosodiphenylamine	ND	10	"							
Pentachlorophenol	ND	10	"							
Phenanthrene	ND	5.0	"							
Phenol	ND	5.0	"							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	10	"							
2,4,5-Trichlorophenol	ND	5.0	"							
2,4,6-Trichlorophenol	ND	5.0	"							
Surrogate: 2-Fluorophenol	*54.1*		*"*	*100*		*54*	*40-115*			

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C19005 - EPA 3510C SepFunnel / EPA 8270C										
Blank (5C19005-BLK1)				Prepared: 03/19/05 Analyzed: 03/21/05						
Surrogate: Phenol-d6	*36.2*		*ug/l*	*100*		*36*	*20-115*			
Surrogate: Nitrobenzene-d5	*40.0*		*"*	*50.0*		*80*	*50-115*			
Surrogate: 2-Fluorobiphenyl	*39.4*		*"*	*50.0*		*79*	*70-115*			
Surrogate: 2,4,6-Tribromophenol	*75.8*		*"*	*100*		*76*	*35-115*			
Surrogate: p-Terphenyl-d14	*45.5*		*"*	*50.0*		*91*	*70-130*			
Laboratory Control Sample (5C19005-BS1)				Prepared: 03/19/05 Analyzed: 03/21/05						
Acenaphthene	49.8	5.0	ug/l	50.0		100	75-115			
4-Chloro-3-methylphenol	51.0	5.0	"	50.0		102	75-130			
2-Chlorophenol	44.1	5.0	"	50.0		88	45-120			
1,4-Dichlorobenzene	38.7	10	"	50.0		77	35-115			
2,4-Dinitrotoluene	52.7	5.0	"	50.0		105	75-120			
4-Nitrophenol	23.7	10	"	50.0		47	15-115			
N-Nitrosodi-n-propylamine	48.7	5.0	"	50.0		97	55-120			
Pentachlorophenol	48.5	10	"	50.0		97	30-120			
Phenol	23.7	5.0	"	50.0		47	25-115			
Pyrene	49.2	5.0	"	50.0		98	75-140			
1,2,4-Trichlorobenzene	41.6	10	"	50.0		83	35-115			
Surrogate: 2-Fluorophenol	*55.9*		*"*	*100*		*56*	*40-115*			
Surrogate: Phenol-d6	*38.4*		*"*	*100*		*38*	*20-115*			
Surrogate: Nitrobenzene-d5	*39.0*		*"*	*50.0*		*78*	*50-115*			
Surrogate: 2-Fluorobiphenyl	*37.7*		*"*	*50.0*		*75*	*70-115*			
Surrogate: 2,4,6-Tribromophenol	*77.1*		*"*	*100*		*77*	*35-115*			
Surrogate: p-Terphenyl-d14	*40.9*		*"*	*50.0*		*82*	*70-130*			
Laboratory Control Sample Dup (5C19005-BSD1)				Prepared: 03/19/05 Analyzed: 03/21/05						
Acenaphthene	45.2	5.0	ug/l	50.0		90	75-115	10	15	
4-Chloro-3-methylphenol	45.8	5.0	"	50.0		92	75-130	11	15	
2-Chlorophenol	41.8	5.0	"	50.0		84	45-120	5	35	
1,4-Dichlorobenzene	37.1	10	"	50.0		74	35-115	4	20	
2,4-Dinitrotoluene	45.5	5.0	"	50.0		91	75-120	15	20	
4-Nitrophenol	19.2	10	"	50.0		38	15-115	21	35	
N-Nitrosodi-n-propylamine	45.0	5.0	"	50.0		90	55-120	8	20	
Pentachlorophenol	43.2	10	"	50.0		86	30-120	12	35	
Phenol	22.0	5.0	"	50.0		44	25-115	7	30	
Pyrene	44.5	5.0	"	50.0		89	75-140	10	15	
1,2,4-Trichlorobenzene	39.6	10	"	50.0		79	35-115	5	15	

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5C19005 - EPA 3510C SepFunnel / EPA 8270C										
Laboratory Control Sample Dup (5C19005-BSD1)				Prepared: 03/19/05 Analyzed: 03/21/05						
Surrogate: 2-Fluorophenol	*55.5*		*ug/l*	*100*		*56*	*40-115*			
Surrogate: Phenol-d6	*37.3*		*"*	*100*		*37*	*20-115*			
Surrogate: Nitrobenzene-d5	*40.2*		*"*	*50.0*		*80*	*50-115*			
Surrogate: 2-Fluorobiphenyl	*38.0*		*"*	*50.0*		*76*	*70-115*			
Surrogate: 2,4,6-Tribromophenol	*77.8*		*"*	*100*		*78*	*35-115*			
Surrogate: p-Terphenyl-d14	*40.9*		*"*	*50.0*		*82*	*70-130*			

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Dept. of Toxic Substances Contol-Berkeley	Project:OEHHA Playground Study	MOC0103
700 Heinz Avenue, Suite 100	Project Number:SAU5634	**Reported:**
Berkeley CA, 94710	Project Manager:Vidair	03/24/05 15:53

Notes and Definitions

S02	The surrogate recovery was below control limits.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
QM02	The spike recovery was below control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
HT-03	This sample was extracted beyond the EPA recommended holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

...nmental Protection Agency

MDL 0103

Department of Toxic Substances Control
Hazardous Materials Laboratories

...RDOUS MATERIALS
...LE ANALYSIS REQUEST

1. Authorization Number: SAUS634

HML No. To

2. Page of

...QUESTOR: VIDAIR/PETREAS

4. Phone (510) 540 - 3003

ADDRESS (To Receive Results)
700 HEINZ AVE, SUITE 100
BERKELEY CA 94710

6. FAX ( ) - 2305

7. TAT Level: (check one)
☐ *1 ☒ 2 ☐ 3 ☐ 4

* Unit Chief's Signature

8. DATE SAMPLED: 3/1/05

9. Codes (fill in all applicable codes)
a. Office
b. INDEX
c. PCA
d. MPC
e. SITE
f. County

10. ACTIVITY: ☐ SCD ☐ SRPD ☐ CIB ☐ SMB ☐ FPB ☐ SPPT ☐ Others

11. SAMPLING LOCATION
a. EPA ID No.
b. Site OEHHA PLAYGROUND STUDY
c. Address
Number Street City ZIP

12. SAMPLES:

a. ID	b. Collector's No.	c. HML No.	Sample d. Type	Container e. Type	f. Size	g. Field Information
A	G		AQUEOUS	GLASS	200 ml's / 16 OZ	CONTAINER
B	S		"	"		
C	O		"	"		
D	CON		"	"	↓	
E						
F						

13. ANALYSIS REQUESTED: (X desired analysis and enter I.Ds from 12.a.)

	INORGANIC ANALYSIS	Sample(s) ID
	pH	
X	Metals Scan (6010) 6020	A - D
	Metal(s) Specific	
	WET	
	Cyanides	
X	Hg 7471 (others, write in)	A - D
	(others, write in)	
	TCLP Analysis ☐ (only if necessary) ☐ (do TCLP regardless)	
	Metals	
	Mercury	
	Volatiles	
	Semivolatiles	
	(others, write in)	

	ORGANIC ANALYSIS	Sample(s) ID
	CL-Pesticides (8081)	
	OP-Pesticides (8141)	
	PCBs (8082)	
	G R O (8015B)	
	D R O / Motor Oil / Both (circle one)	
	n-Hexane Extractables (1664)	
	Flash Point (1020)	
	VOCs including BTEX (8260)	
	VOCs - LO Level (5035)	
	VOCs - HI Level (5035)	
X	SVOCs (8270)	A - D
X	PAHs (8270) / SIM	A - D
	(others, write in)	

FIELD

14. ANALYSIS OBJECTIVE: (check a box)
☐ Waste Characterization
☐ Drinking H_2O Standards (applies to DW only)
☐ Treatment Standards
☒ Others (contact Lab supervisors first)

15. DETECTION LIMIT REQUIREMENTS: (specify if known and contact lab) As low as possible

16. SUPPLEMENTAL REQUESTS
Initials
Date

17. LAB REMARKS:
BUFFER CONTAINS CITRIC ACID SODIUM CITRATE, KCL, NaCl, PEPSIN (1 mg/ml)

LAB

18. CHAIN OF CUSTODY:

	Signature(s)	Name(s) / Title (s)	Inclusive Dates of Custody
a.		M PETREAS, HML	3/1/05 to
b.		MAURICE SEALS, SEQUOIA	3/2/05 to
c.		J. Diamond	3/2/05 to 1840
d.			to

COC

DTSC 1116H (REV 6/00) Make Photocopies for your File NLY

California Department of Toxic Substances Control

Hazardous Materials Laboratory

700 Heinz Avenue, Suite#150, Berkeley, CA 94710

SAMPLE / SAMPLE EXTRACT TRANSPORT CUSTODY

MOC0103

Receiving Lab / Section: Sequoia Lab

Sample Collection Site: OEHHA PLAYGROUND STUDY

HML # or Collector's #	Sample Type *	Analysis Requested	Location of Sample (s)	Remarks
G	AQUEOUS	Refer TO SAR		
S	"	↓		
O	"	↓		
CON	"	↓		

- **OSC** = original sample container; **SS** = split sample; **A** = Aliquot; **C** = Citrate WET; **E** = Extract; **D** = acid digest; **T** = TCLP extract.

Release for transport by: Dinesh Chand Time / Date 2:20 3/2/05

Transported to: Sequoia Lab/ GC/MS/ Org sec / Inorg sec/ Fed Ex / Others

By: ~~Saad Sultan~~ [signature] Time / Date 3/2/05 2:20pm

Received by: [signature] Time / Date 3/2/05

Returned to HML by: ____________ Time / Date ______

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: DTSC
REC. BY (PRINT): JD
WORKORDER: 405C0103

DATE REC'D AT LAB: 3/2/05
TIME REC'D AT LAB: 1840
DATE LOGGED IN: 3-4-05

For Regulatory Purposes?
DRINKING WATER YES / NO
WASTE WATER YES / NO

(For clients requiring preservation checks at receipt, document here ↓)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent) Intact / Broken*	01	A	G	1602 Jar	—	—	W	3/1/05	
	02		S						
2. Chain-of-Custody (Present) / Absent*	03		D						
3. Traffic Reports or Packing List: Present / (Absent)	04		CON						
4. Airbill: Airbill / Sticker Present / (Absent)									
5. Airbill #:									
6. Sample Labels: (Present) / Absent									
7. Sample IDs: (Listed) / Not Listed on Chain-of-Custody									
8. Sample Condition: (Intact) / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? (Yes) / No*									
10. Sample received within hold time? (Yes) / No*									
11. Adequate sample volume received? (Yes) / No*									
12. Proper Preservatives used? (Yes) / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / (No*)									
14. Temp Rec. at Lab: 4.3 Is temp 4 +/-2°C? (Yes) / No**									

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): METALS / DFF ON ICE or Problem COC

3/2/05

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.